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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,043	11/16/2001	Dayna A. Byrne	01-559 1496.00174	4456

24319 7590 11/19/2004

LSI LOGIC CORPORATION  
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MILPITAS, CA 95035

EXAMINER
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WILSON, YOLANDA L

ART UNIT	PAPER NUMBER
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2113

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/992,043

Applicant(s)

BYRNE ET AL.

Examiner

Yolanda Wilson

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-14, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 15-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **FINAL DETAILED ACTION**

### ***Claim Objections***

1. Claims 6-8,15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5,9-14,19,20 are rejected under 35 U.S.C. 102(e) as being anticipated by Edwards et al. (US Publication Number 20030056154A1). As per claim 1, Edwards et al. discloses a plurality of processors on page 4, paragraph 0057, "It should be understood that any type of processor and any number of processors may be used."; a trace circuit configured to present information at a port for debugging software in a selected processor of said processors on page on page 5, paragraph 0072; a connector circuit configured to couple said trace circuit to said selected processor in response to a select signal and transfer said information from said selected processor to said trace circuit while said selected processor is executing said software on page 4, paragraph 0058 and page 5, paragraphs 0072-0073. The connector circuit is the communication

link 104 from the trace circuit to the selected processor. The trace circuit is part of the debug circuit as disclosed in Figures 2 and 3. Edwards et al. discloses a boundary scan chain connected to each of said processor and said trace circuit on page 11, paragraphs 0128,0129 and Figures 2 and 3.

4. As per claim 2, Edwards et al. discloses wherein said connector circuit is further configured to transfer data from said trace circuit to said selected processor on page 4, paragraph 0058 and page 5, paragraphs 0072-0073.

5. As per claim 3, Edwards et al. discloses wherein said connector circuit is further configured to transfer a first test data stream received by said selected processor through said boundary scan chain to said trace circuit on page 4, paragraph 0058 and page 5, paragraphs 0072-0073; on page 11, paragraphs 0128,0129 and Figures 2 and 3.

6. As per claim 4, Edwards et al. discloses wherein said connector circuit is further configured to transfer a second test data stream from said trace circuit through said boundary scan chain to said selected processor on page 4, paragraph 0058 and page 5, paragraphs 0072-0073; on page 11, paragraphs 0128,0129 and Figures 2 and 3.

7. As per claim 5, Edwards et al. discloses a first circuit configured to transfer said information from said selected processor to said trace circuit, transfer data from said trace circuit to said selected processor, and present a predetermined logic state to said processors other than said selected processor; and a second circuit configured to transfer a first test data stream received by said selected processor to said trace circuit, transfer a second test data stream from said trace circuit to said selected processor,

and present a second predetermined logic state to said processors other than said selected processor on page 4, paragraph 0058 and page 5, paragraphs 0072-0073; on page 11, paragraphs 0128,0129 and Figures 2 and 3.

8. As per claims 9 and 19, Edwards et al. discloses coupling a trace circuit to said selected processor in response to a select signal; transferring said information from said selected processor to said trace circuit while said selected processor is executing said software; and presenting said information received by said trace circuit at a port; and connecting said processors and said trace circuit through a boundary scan chain on page 4, paragraph 0058 and page 5, paragraphs 0072-0073; on page 11, paragraphs 0128,0129. The trace circuit is part of the debug circuit as disclosed in Figures 2 and 3. Also see claim 1.

9. As per claim 10, Edwards et al. discloses transferring data from said trace circuit to said selected processor on page 4, paragraph 0058 and page 5, paragraphs 0072-0073.

10. As per claim 11, Edwards et al. discloses transferring a first test data stream received by said selected processor to said trace circuit on page 4, paragraph 0058 and page 5, paragraphs 0072-0073; on page 11, paragraphs 0128,0129 and Figures 2 and 3.

11. As per claim 12, Edwards et al. discloses transferring a second test data stream from said trace circuit to said selected processor on page 4, paragraph 0058 and page 5, paragraphs 0072-0073; on page 11, paragraphs 0128,0129 and Figures 2 and 3.

12. As per claim 13, Edwards et al. discloses presenting a predetermined logic state to said processors other than said selected processor in response to transferring said data on page 4, paragraphs 0057-0058 and page 5, paragraphs 0072-0073; on page 11, paragraphs 0128,0129 and Figures 2 and 3.

13. As per claim 14, Edwards et al. discloses presenting a second predetermined logic state to said processors other than said selected processor in response to transferring said second test data stream on page 4, paragraphs 0057-0058 and page 5, paragraphs 0072-0073; on page 11, paragraphs 0128,0129 and Figures 2 and 3.

14. As per claim 20, Edwards et al. discloses wherein said processors, said trace circuit and said connector circuit are embedded in a single integrated circuit on page 4, paragraphs 0056-0058. Communication link 104 is the connector circuit.

### ***Response to Arguments***

15. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection. The primary prior art, Swoboda et al., has been changed to Edwards et al. in view of the added limitation located above in the respective claims.

### ***Conclusion***

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yolanda Wilson whose telephone number is (571) 272-3653. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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